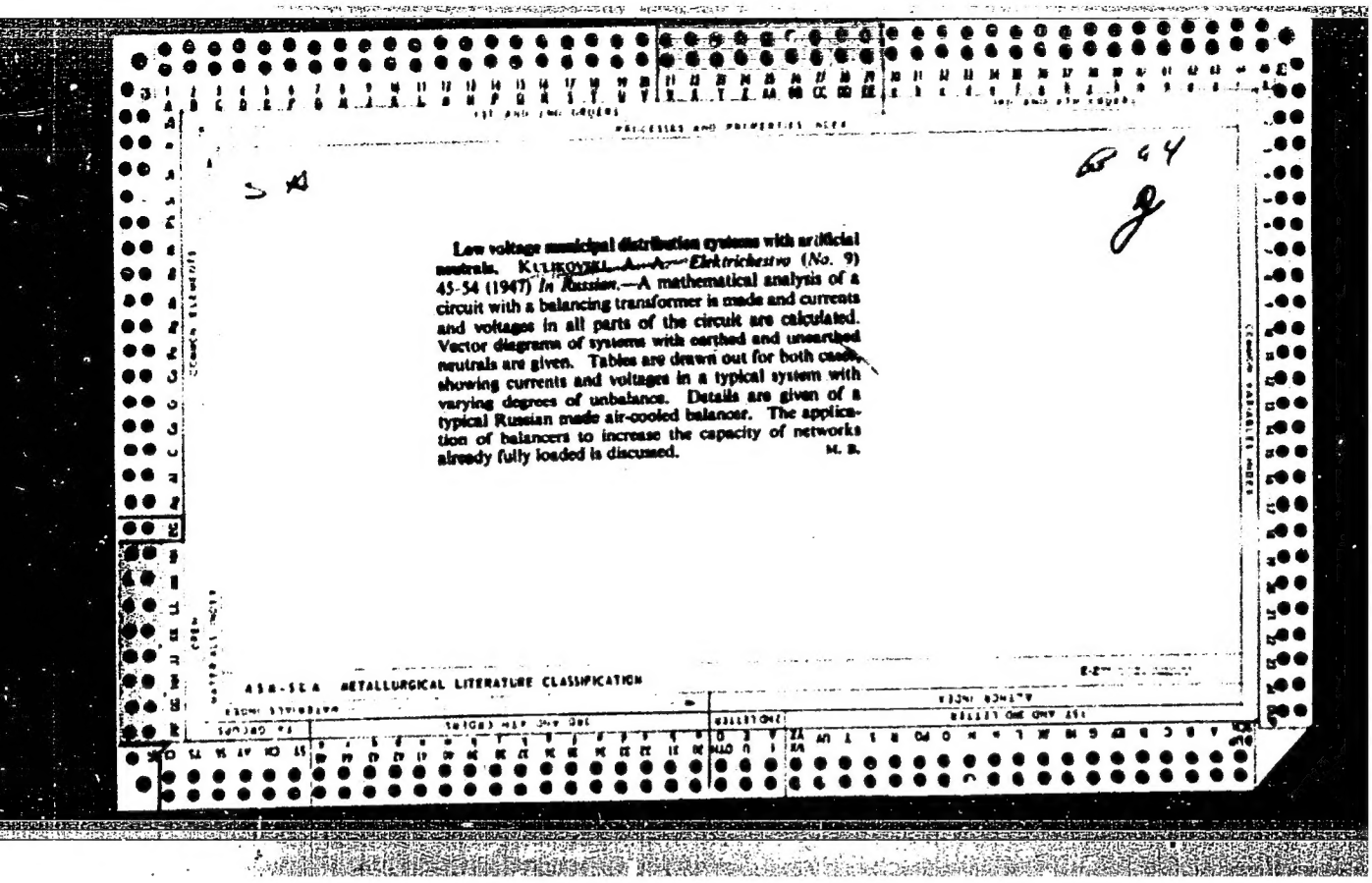


Low voltage municipal distribution systems with artificial neutrals. KULIKOVSKI, A. A. *Elektrichestvo* (No. 9) 45-54 (1947) *In Russian.*—A mathematical analysis of a circuit with a balancing transformer is made and currents and voltages in all parts of the circuit are calculated. Vector diagrams of systems with earthed and unearthed neutrals are given. Tables are drawn out for both cases showing currents and voltages in a typical system with varying degrees of unbalance. Details are given of a typical Russian made air-cooled balancer. The application of balancers to increase the capacity of networks already fully loaded is discussed. M. B.

USSR/Electricity Dec 1947
Power Transmission
Voltage Regulators

"Regulation of the Feeder Voltage as Means of Lowering the Energy Losses in City Power Circuits," A. A. Kulikovskiy, Engr, 4 pp

"Elektricheskiye Stantsii" No 12

Has been noticed for long time that voltage eventually arriving at the point of use was much lower than at the point of source. Some loss inevitable. Author discusses system of transformers that can be used to equalize the voltage and greatly cut down energy losses in feeder lines. States that method be suggests to be used only as supplement to already existing means of decreasing energy losses.

PA 50T14

KULIKOVSKIY, A.A.

50T14

KULIKOVSKIY, A. A.

"New Developments in Radio Reception Techniques", Gosenergoizdat, 120 pp, 1950.

KULIKOVSKIY, A. A.

178T57

USSR/Electricity - Distribution Systems Apr 51
Transformers

"Responses to N. F. Tikhonov's Article 'Grounding the Neutral Points of Transformer Windings in 380-V Networks' (Elektrichestvo, No 4, 1951)," I. A. Syromyatnikov, Cand Tech Sci, Tech Adm of Min Elec Power Sta, Engr A. A. Kulikovskiy, Moscov, L. P. Podol'skiy, Cand Tech Sci, Moscov Planning-Constr Adm of "Tsentroelektromontazh"

"Elektrichestvo" No 4, pp 74-76

Syromyatnikov agrees that Tikhanov has found a defect, but believes the remedy should be preventive high-voltage insulation tests rather [redacted]

178T57

USSR/Electricity - Distribution Systems Apr 51
(Contd)

than grounding of transformer neutrals. Other 2 writers agree with Tikhonov that "Rules for Grounding Electrical Equipment Carrying Voltages Up to 1,000 V" should be rewritten to make it easier to ground neutrals.

[redacted]

178T57

KHAYKIN, S.E.; KULIKOVSKIY, A.A., redaktor; LARIONOV, G.Ye., tekhnicheskiy redaktor

[Continuous oscillations] Nezatukhaiushchie kolebaniia. Moskva, Gos. energ. izd-vo, 1953. 125 p. (Massovaia radiobiblioteka, no.181) [Microfilm] (MLRA 7:10)

(Oscillators, Electron-tube)

KULIKOVSKIY, A.A.

LEVITIN, Ye.A.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; THAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; SPIZHEVSKIY, I.I., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Superheterodyne] Supergeterodin. Moskva, Gos. energ. izd-vo, 1954. 11 p. (Massovaia radiobiblioteka, no. 200) [Microfilm] (MLRA 7:11) (Radio--Receivers and reception)

OYFA, I.L.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I. redaktor; MALININ, R.M., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Intercom loud-speaker apparatus] Peregovornoe gromkogovoriashchee ustroistvo. Moskva, Gos. energ. izd-vo, 1954. 14 p. (Massovaia radiobiblioteka, no. 202)
(Loud-speakers) (MIRA 7:11)

KULIKOVSKIY, A.A.

STARIKOV, I.G.; SPIZHEVSKIY, I.I., redaktor; TARASOV, F.I., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Television set with few tubes] Malolampovyi televizor. Pod red. L.I. Spizhevskogo. Moskva, Gos. energ. izd-vo, 1954. 37 p. (Massovaia radiobiblioteka, no.197) [Microfilm]
(Television) (MLRA 7:12)

NELEPETS, V.S.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; YAKOBSON, A.Kh., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor

[Radio engineering in railroad transportation] Radiotekhnika na zheleznodorozhnom transporte. Moskva, Gos. energ. izd-vo, 1954. 43 p. (Massovaia radiobiblioteka, no. 196) [Microfilm] (MLRA 7:10)
(Radio) (Railroads--Electronic equipment)

KULIKOVSKIY A.A.

GOL'DREYER, A.G.; YAKOBSON, A.Kh., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMMUR, V.I., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[Feedback electronic cascades] Lampovyi kaskad s obratnoi sviaz'iu. Moskva, Gos. energeticheskoe izd-vo, 1954. 86 p. (Massovaia radiobiblioteka, no. 201)
(Amplifiers, Electron tube) (MLRA 7:11)

SUTYAGIN, V.Ya.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F , redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; KRIVOSHEYEV, I.I., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Circuits of television receiver scanning devices] Skhemy razvertyvaiushchikh ustroistv televizionnykh priemnikov. Moskva, Gos. energ. izd-vo, 1954. 93 p. (Massovaia radiobiblioteka, no. 199) (MLRA 7:9)
(Television--Receivers and reception)

PLONSKIY, A.F.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHASHMUR, V.I., redaktor; SENCHENKOV, A.F., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor

[Quartz resonators] Kvartsevye rezonatory. Moskva, Gos. energ. izd-vo, 1954. 94 p. [Microfilm] (MLRA 7:10)
(Electric resonators)

BYALIK, Gavriil Iosifovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; KRIVOSHEYEV, M.I., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor

[The technique of television transmission] Tekhnika televizionnykh peredach. Moskva, Gos. energ. izd-vo, 1954. 96 p. (Massovaia radio-biblioteka, no.205) (MLRA 8:3)
(Television-Transmitters and transmission)

LEVITIN, Yefim Alekseyevich; KUBARKIN, L.V., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[Electron tubes] Elektronnye lampy. Pod red. L.V.Kubarkina. Moskva, Gos.energ. izd-vo, 1954. 101 p. (Massovaia radiobiblioteka, no.209) [Microfilm] (MLRA 8:2)

(Electron tubes)

LOGINOV, V.N., Viktor Nikolayevich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; VAYNSHTEYN, S.S., redaktor; VORONIN, K.P., tekhnicheskiy redaktor

[Radio measurements] Radiozmereniia. Moskva, Gos. energ. izd-vo, 1954. 119 p. (Massovaia radiobiblioteka, no.208) (MLRA 8:3)
(Radio measurements)

PRESSMAN, Aleksandr Samuilovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, I.O., redaktor; SHAMSHUR, V.I., redaktor; KONASHINSKIY, A.D., redaktor; LARIONOV, G.Ye., tekhnicheskiy redaktor.

[Centimeter waves] Santimetrovye volny. Moskva, Gos. energ. izd-vo, 1954. 119 p. (Massovaia radiobiblioteka, no. 203) [Microfilm] (Radio waves) (MLRA 7:11)

KULIKOVSKIY, A.A.

YEL'YASHKEVICH, Samuil Abramovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; NIKOLAYEVSKIY, I.F., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor

[Eliminating defects from television receivers] Ustranenie neispravnostei v televizore. Moskva, Gos. energ. izd-vo, 1954. 151 p. (Massovaia radiobiblioteka, no.211) (MLRA 8:3)
(Television--Repairing)

KULIKOVSKIY, A.A.; SUTYAGIN, V.Ya., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor

[New developments in amateur radio receivers] Novoe v tekhnike liubitel'skogo radioprioma. 2-e izd., perer. Moskva, Gos. energeticheskoe izd-vo, 1954. 174 p. (Massovaia radiobiblioteka, no.207) (MLRA 8:3)
[Microfilm]
(Radio-Receivers and reception)

SHAMSHUR, Vladimir Ivanovich; KULIKOVSKIY, A.A., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[First years of Soviet radio engineering and amateur radio work] Pervye gody sovetskoi radiotekhniki i radioliubitel'stva. Moskva, Gos. energ. izd-vo, 1954. 247 p. (Massovaia radiobiblioteka, no.213) (MIRA 8:1) [Microfilm]

(Radio)

STEPANOV, Sergey; KORNDORF, S.F., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOKHZHEVELOV, B.N., redaktor SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, B.I., redaktor; VORONIN, K.P., tekhnicheskiy redaktor

[Calculations for measuring instruments] Raschet izmeritel'nykh priborov. Moskva, Gos. energeticheskoe izd-vo, 1955. 30 p. (Massovaia radiobiblioteka, no.215) [Microfilm] (MLRA 8:2)
(Measuring instruments)

GOL'DREYER, Iona Gutelevich; ROGINSKIY, Vladimir Yur'yevich; BERG,A.I., redaktor; DZHIGIT,I.S., redaktor; YELIN,O.G., redaktor; KULIKOVSKIY,A.A., redaktor; MOZHZHEVELOV,B.N., redaktor; SMIRNOV,A.D., redaktor; TARASOV,F.I., redaktor; TRAMM,B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR,V.I., redaktor; LEVITIN,Ye.A., redaktor; VORONIN,K.P., tekhnicheskiy redaktor

[Self-righting amplifier systems] Samovypriamliaiushchie usilitel'nye skhemy. Moskva, Gos.energ.izd-vo, 1955. 46 p. (MLRA 9:3)
(Amplifiers, Electron-tube)

ROGINSKIY, V. Yu.

ROGINSKIY, Vladimir Yur'yevich; FEYGEL'S, Viktor Zinov'yevich; BERG,A.I., redaktor; DZHIGIT,I.S., redaktor; YELIN,O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV,B.N., redaktor; SMIRNOV,A.D., redaktor; TARASOV,F.I., redaktor; TRAMM,B.F., redaktor; CHECHIK,P.O., redaktor; SHAMSHUR,V.I., redaktor; KUBARKIN,L.V., redaktor; LARIONOV,G.Ye., tekhnicheskiy redaktor

[From microphone to loudspeaker] Ot mikrofona do gromkogovoritelia. Moskva, Gos. energ. izd-vo, 1955. 63 p. (Massovaia radiobiblioteka, no.233) (MLRA 9:2)

(Radio)

LEVITIN, Yefim Alekseyevich; KONASHINSKIY, D.A., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor. VORONIN, K.P., tekhnicheskiy redaktor.

[Tuning of radio receivers] Nalazhivanie priemnikov. 2-e izd., perer. Moskva, Gos. energ. izd-vo, 1955. 87 p. (Massovaia radiobiblioteka, no. 225) (MLRA 9:2)
(Radio -- Receivers and reception)

FEDOTOV, Yakov Andreyevich; KULIKOVSKIY, A.A., redaktor; BERG, A.I., redaktor; DZHIGIT I.S., redaktor; YELIN, O.G., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHASHMUR, V.I., redaktor.; LARIONOV, G.Ye., tekhnicheskiy redaktor

[Crystal triodes] Kristallicheskie triody. Moskva, Gos.energ. izd-vo, 1955. 94 p. (Massovaia radiobiblioteka no.216) (Electron tubes) (MLRA 8:9)

KULIKOVSKIY, A.A.

CHECHIK, Nikolay Oskarovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVKLOV, B.M. redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM B.F. redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; ZHIGAREV, A.A., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[Photoelectric cells and their use] Fotoelementy i ikh primenenie Moskva, Gos.energ.izd-vo, 1955. 111 p. (Massovaia radiobiblioteka no.228) (MLRA 8:11)

(Photoelectric cells)

SHADOV,R.; CHECHIK,P.O.[translator]; BERG,A.I., redaktor; DZHIGIT,I.S., redaktor; YELIN,O.G., redaktor; KULIKOVSKIY,A.A., redaktor; MOZHZHEVELOV,B.N., redaktor; SMIRNOV,A.D., redaktor; TARASOV,F.I., redaktor; TRAMM,B.F., redaktor; SHAMSHUR,V.I., redaktor; LEVITIN, Ye.A., redaktor; VORONIN,K.P., tekhnicheskiy redaktor

[Testing apparatus for repairing radio receivers. Translated from the German] Ispytatel'naia apparatura dlia remonta priemnikov. Perer.perevod s nemetskogo P.O.Chechika. Moskva, Gos.energ.izd-vo 1955. 125 p. (Massovaia radiobiblioteka, no.232) (MLRA 9:3)
(Radio--Receivers and reception)

KULIKOVSKIY, M.A.

SOMINSKIY, Monus Samuilovich; BROYDE,A.M., redaktor; BERG,A.I., redaktor; DZHIGIT,I.S., redaktor; YELIN,O.G., redaktor; KULIKOVSKIY,A.A., redaktor; MOZHZHEVELOV,B.N., redaktor; SMIRNO,N.D., redaktor; TARASOV,F.I., redaktor; TRAMM,B.F., redaktor; CHECHIK,P.O., redaktor; SHAMSHUR,V.I., redaktor; LARIONOV,G.E., tekhnicheskiy redaktor

[Semiconductors and their use] Poluprovodniki i ikh primenenie. Moskva, Gos.energ. izd-vo, 1955. 127 p. (Massovaia radiobiblioteka, no.236)

(Semiconductors) (MLRA 9:2)

KULIKOVSKIY, A.N.

MAZEL', Klimentiy Borisovich; BROYDE, A.M., redaktor; BERG, A.I., redaktor; DZHIGIT,I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHUKHOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV , F.I., redaktor; TRAMM, B.F., redaktor; CHECKIK, P.O., redaktor; SHAMSHUR, V.I. redaktor; SKVORTSOV,I.M., tekhnicheskiy redaktor

[Voltage and current stabilizers] Stabilizatory napriazheniia i toka. Moskva, Gos.energ.izd-vo, 1955. 133 p. (Massovaia radio-biblioteda, no.218)
(Voltage regulators) (MLRA 8:9)

KULIKOVSKIY, A.A.

ROZENBLATT, Moisey Aronovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZHEVELOV, B.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; SENCHENKOV, A.F., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[Magnetic amplifiers] Magnitnye usiliteli. Moskva, Gos.energ. izd-vo, 1955. 135 p. (Massovaia radiobiblioteka, no.230)
(Magnetic amplifiers) (MLRA 8:11)

VOLIN, M.L.; KULIKOVSKIY, A.A., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor.

[Intermediate-frequency amplifiers]Usiliteli promezhutochnoi chastoty. Izd. 2-e, perer. Moskva, Gos.energ.izd-vo, 1955. 177 p.
(Amplifiers, Electron-tube) (MLRA 8:3)

KULIKOVSKIY, A.A.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; MOSHZHEVELOV, G.N., redaktor; SMIRNOV, A.D., redaktor; TARASOV, A.D., redaktor; TRAMM, B.F., redaktor. CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; ZHUKHOVITSKIY, B. Ya., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor

[Manual for the amateur radio operator] Spravochnik radioliubitelia. Moskva, Gos.energ.izd-vo, 1955. 256 p. (Massovaia radiobiblioteka, no.222) (MLRA 8:9)
(Radio-Amateur's manuals)

BORISOV, Viktor Gavrilovich; BERG, A.I.; DZHIGIT, I.S.; VKLIN, O.G., KULIKOVSKIY, A.A.; MOZHZHEVELOV. B.N.; SMIRNOV, A.D.; TARASOV, F.I.; [illegible], B.F.; CHECHIK, P.O.; SHAMSHUR, V.I.; MALININ, R.M. redaktor; VORONIN, K.P., tekhnicheskiy redaktor

[Young radio amateur] IUnyi radioliubitel'. Izd. 2-oe, ispr. i dop. Moskva, Gos.energ.izd-vo 1955. 271 p.(Massovaia radio-biblioteka, no.224)
(Radio--Amateurs' manuals) (MLRA 8:11)

- Circuit Theory

KULIKOVSKIY, A. A.

Pub. 30-3/

PA-2495

Author : Kulikovskiy, A. A., Active Member, VNORIS

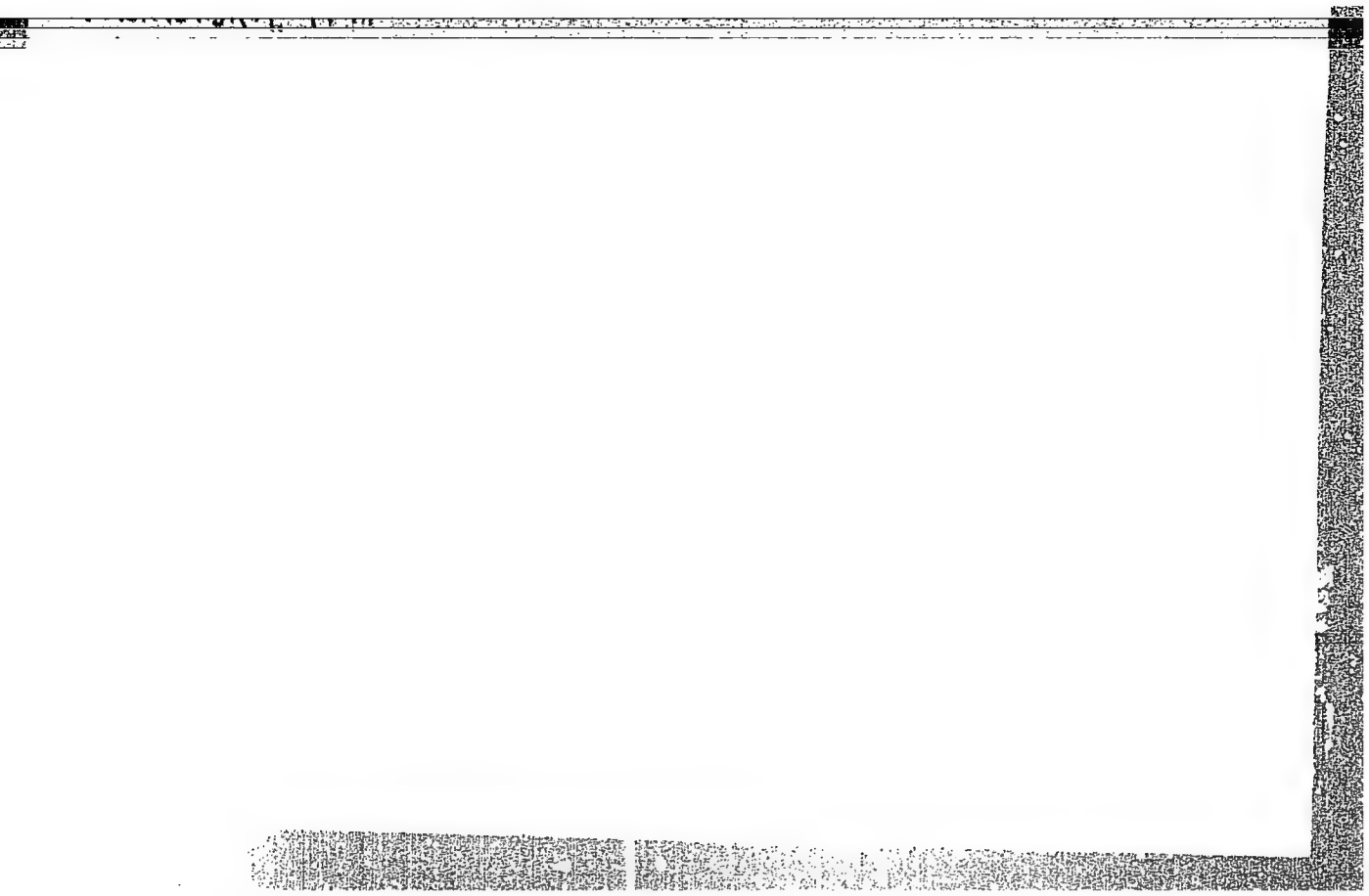
Title : Establishment processes during detection of pulse signals

Periodical : Radiotekhnika, 10, 6, 21-28, Jun 55

Abstract : A method of calculating the steady-state pulse-signal voltage on the load of a detector, with the aid of Duhamel's integral, for the condition of a slowly changing dc component, are presented in this article. A convenient integration method is offered for determination of the dc component of the detector current for a linear segmental approximation of the detector current characteristic. With the aid of this method simple expressions are found for the steady-state voltages at the plate, diode and cathode of detectors in the detection of pulses with rectangular envelopes. Application of the derived formulas for establishment of the conditions for detection of pulses having envelopes of other forms are explained. Five references: all USSR.

Institution : All-Union Scientific and Technical Society of Radio (VNORIS) Engineering and Electric Communications imeni A. Popov

Submitted : November 16, 1954



APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000927430002-4"

RIZKIN, Yefim Arenovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; KONASHINSKIY, D.A., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[How to build a collective farm broadcasting studio] Kak postroit' kolkhoznuiu rechevuiu studiiu. Moskva, Gos.energ. izd-vo, 1956. 14 p. (Massovaia radiobiblioteka, no.239).
(Radio stations) (Radio in agriculture) (MIRA 9:6)

BARSUKOV, Filipp Ivanovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; THAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; TARASOV, F.I., redaktor; LARIONOV, G.Ye., tekhnicheskiy redaktor.

[Three-tube radio receiver] Trekhlampovyi radiopriemnik. Moskva, Gos. energ. izd-vo, 1956. 15 p. (Massovaia radiobiblioteka no.238) (Radio--Receivers and reception) (MLRA 9:6)

CHECHIK, Petr Oskarovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor TRAMM, B.F., redaktor; SHAMSHUR, V.I., redaktor; TARASOV, F.I., redaktor; VORONIN, K.P., tekhnicheskiy redaktor

[New sources of current for radio apparatus] Novye istochniki pitaniia radioapparatury. Moskva, Gos. energ. izd-vo, 1956. 39 p. (Massovaia radiobiblioteka, no.257) (MLRA 10:5)
(Radio--Apparatus and supplies) (Electric batteries)

GONCHARSKIY, Lush Abramovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; FROYMAN, A.I.,redaktor; LARIONOV, G.Ye., tekhnicheskiy redaktor

[Electron tubes with mechanical controls] Elektronnaia lampa s mekhanicheskim upravleniem. Moskva, Gos.energ. izd-vo 1956. 39 p. (Massovaia radiobiblioteka, no.243) (MLRA 9:8)
(Electron tubes)

ALEKSEYEVSKIY, A.A.

ZAGIK, Semen Yefimovich; KAPCHINSKIY, Lev, Mikhaylovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; THAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; OVCHARENKO, Ye. P., redaktor; VORONIN, K.P., tekhnicheskiy redaktor

[Television reception antennas] Priemnye televizionnye antenny. Moskva, Gos. energ. izd-vo, 1956. 47 p. (MLRA 10:4)
(Television--Antennas)

MIKHLIN, Berka Zys'yevich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; GINZBURG, Z.B., redaktor; CHERNOV, V.S., tekhnicheskiy redaktor

[Electronic instruments for production control] Radioelektronnye pribory dlia proizvodstvennogo kontrolia. Moskva, Gos. energ. izd-vo, 1956. 62 p. (Massovaia radiobiblioteka, no.258)
(Automatic control) (Electronic instruments)
(Production control)

KUBARKIN, L. V.

KUBARKIN, Leontiy Vladimirovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I. redaktor; GINZBURG, Z.B., redaktor; LARIONOV, G.Ye., tekhnicheskiy redaktor

[Radio circuit primer] Azbuka radioskhem. Moskva, Gos. energ. izd-vo, 1956. 63 p. (Massovaia radiobiblioteka, no.259) (MLRA 10:5)
(Radio circuits)

CHUL'GIN, Konstantin Aleksandrovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; MEL'NIKOVSKAYA, R.D., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor.

[How a radio receiver works] Kak rabotaet radiopriemnik. Moskva, Gos. energ. izd-vo, 1956. 78 p. (Massovaia radiobiblioteka, no.242) (Radio--Receivers and reception)

BYALIK, Gavriil Iosifovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; KRIVOSHEYEV, M.I., redaktor; SKVORTSOV, I.M., tekhnicheskiy redaktor.

[Broadband amplifiers] Shirokopolosnye usiliteli. Izd. 2-oe, perer. Moskva, Gos. energ. izd-vo, 1956. 110 p. (Massovaia radiobiblioteka no.240) (Amplifiers, Electron-tube) (MLRA 9:5)

KUBARKIN, Leontiy Vladimirovich; LEVITIN, Yefim Alekseyevich; KULIKOVSKIY, A.A., redaktor; VORONIN, K.P., tekhnicheskiy redaktor

[Radio engineering made interesting] Zanimatel'naia radiotekhnika. Moskva, Gos. energ. izd-vo, 1956. 263 p. (Massovaia radiobiblioteka, no.249)
(Radio) (MLRA 9:11)

KULIKOVSKIY, Aleksandr Aleksandrovich; BOLOSHIN, Igor' Aleksandrovich; POTRYASAY, Vladimir Filippovich; AKALUMIN, S.A., redaktor; CHERNOV, V.S., tekhnicheskiy redaktor

[Principles in teaching radio receiver design] Osnovy uchebnogo proektirovaniia radiopriemnikov. Pod obshchei red. A.A.Kulikovskogo. Moskva, Gos. energ. izd-vo, 1956. 327 p. (MIRA 10:1)
(Radio--Receivers and reception)

KULIKOVSKIY, M.N.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1312
AUTHOR KULIKOWSKIJ, A.A.
TITLE The Transitron Generator as a Device with Back-Coupling.
PERIODICAL Radiotechnika, 11, fasc. 8, 71-73 (1956)
Issued: 9 / 1956 reviewed: 10 / 1956

The basic characteristic of the penthode in connection with transitron operation is a curve which represents the dependence of the current of the second grid on the voltage of the third grid. In the case of a reduced anode voltage this characteristic has a declining branch which is utilized in the transitron schemes.
In the case of such an operation, the points: third grid - cathode are counted as tube "input" which has the control voltage. As "output", where the control current flows, the points are: second grid - cathode. An equivalent scheme of the tube for transitron operation may take the form of an active four-pole with a current generator. The results obtained will differ from those obtained with an ordinary tube used in the same way mainly by the negative rise and, to a small extent, by other values of interelectrode conductivities. The transitron scheme with a common third grid and also with a common second grid must have a negative initial conductivity. This makes it possible to construct autogenerators which utilize negative conductivities.
The most wide-spread are transitron generators with a common cathode and an artificially fitted exterior back-coupling by which the tube receives a negative

KULIKOVSKIY, A.A.

Category : USSR / Radio Physics. General Problems. I-1

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 7225

Author : Kulikovskiy, A.A.
Title : Use of Harmonics for the Calculation of the Envelopes of Curves. (Author's own abstract).

Orig Pub : Radiotekhnika, 1956, 11, No 9, 72-74

Abstract : The author considers the response of a four-terminal network, consisting of a tank circuit in the anode circuit followed by linear stages (the tuned circuit in the anode circuit of a nonlinear tuned amplifier) to a high frequency pulse, in which the waveform of the "filling" oscillations is very far from sinusoidal owing to the nonlinear mode of operation of the preceding tube.

A relation is obtained between the time variation of the voltage at the output of the four-terminal network and the slowly varying envelope of the first harmonic of the Fourier expansion of the current in the plate circuit in the interval $(x, x+T_0)$, where T_0 is the period of the resonant frequency of the four-terminal network.

Card : 1/1

- 2 -

redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor. TRAMM, B.F., redaktor; CHECHIK, M.O., redaktor; SHAMSHUR, V.I., redkator; TARASOV, F.I., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[Pocket transceivers] Karmannye radiostantsii. Moskva, Gos.energ. izd-vo, 1957. 31 p. (Massovaia radiobiblioteka, no.267)
(MLRA 10:6)

(Radio--Apparatus and supplies)

TARASOV, F.I.; BERG, A.I.,redaktor; DZHIGIT, I.S.,redaktor; KULIKOVSKIY, A.A.,redaktor; SMIRNOV, A.D,redaktor; TARASOV, F.I.,redaktor; TRAUM, B.F.,redaktor; CHECHIK, P.O.,redaktor; SHAMSHUR, V.I., redaktor; YENYUMIN, V.V.,redaktor; MEDVEDEV, L.Ya., tekhnicheskiy redaktor

[Diagrams of low-frequency amplifiers for amateurs] Skhemy radioliubitel'skikh usilitelei nizkoi chastoty. Moskva, Gos. energ. izd-vo, 1957. 61 p. (Massovaia radiobiblioteka, no. 264) (MLRA 10:4)

(Amplifiers, Electron-tube)

KAZARYAN, Rafael' Avetisovich; KUVSHINOV, Boris Ivanovich; NAZAROV, Mikhail Vasil'yevich, BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; KHARKEVICH, A.A., redaktor; MEDVEDEV, L. Ya., tekhnicheskiy redaktor

[Elements of the general theory of communications] Elementy obshchei teorii sviazi. Moskva, Gos. energ. izd-vo, 1957. 94 p. (Massovaia radiobiblioteka, no.263) (MLRA 10:4)
(Telecommonication)

LEVANDOVSKIY, Boris Andreyevich; BERG, A.I., red.; DZHIGIT, I.S., red.; KULIKOVSKIY, A.A., red.; SMIRNOV, A.D., red.; TARASOV, F.I., red.; TRAMM, B.F., red.; CHECHIK, P.O., red.; SHAMSHUR, V.I., red.; SOBOLEVSKIY, A.G., red.; CHERNOV, V.S., tekhn.red.

[Portable ultrashort wave radio station] Perenosnaia UKV radiostantsiia. Moskva, Gos.energ.izd-vo, 1957. 31 p. (Massovaia radiobiblioteka, no.278) (MIRA 10:11)
(Radio--Receivers and reception) (Radio--Transmitters and transmission)

YAKOVLEV, Valeriy Vladimirovich; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; [illegible], redaktor; SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; CHECHIK, P.O., redaktor, SHAMSHUR, V.I., redaktor; PLENKIN, Yu.N., redaktor; MEDVEDEV, L.M., tekhnicheskiy redaktor.

[Amateurs' receiving sets using transistors] Liubitel'skie priemniki na poluprovodnikovykh triodakh. Moskva, Gos.energ.izd-vo, 1957. 39 p. (Massovaia radiobiblioteka, no.275) (MIRA 10:11)
(Radio--Receiver and reception) (Transistors)

GRUDINSKAYA, Galina Petrovna; HERG, A.I., red.; DZHIGIT, I.S., red.; KULIKOVSKIY, A.A., red.; SMIRNOV, A.D., red.; TARASOV, F.I., red.; CHECHIK, P.O., red.; SHAMSHUR, V.I., red.; LARIONOV, G.Ye., tekhn.red.

[Ultra-short radio wave propagation] Rasprostranenie ul'trakorotkikh radiovoln. Moskva, Gos.energ.izd-vo, 1957. 62 p. (Massovaia radio-biblioteka, no.281) (MIRA 10:12)

(Radio, Shortwave)

BROYDE, Abram Markovich, ; TARASOV, F.I., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor. KULIKOVSKIY, A.A., redaktor; SMIRNOV, A.D., redaktor,; TRAMM, V.F., redaktor, ;CHECHIK, P.O., redaktor; SHAMSHUR, V.I., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Handbook on electron tube and semiconductor apparatus] Spravochnik po elektrovakuumnym i poluprovodnikovym priboram. Moskva, Gos.energ.izd-vo, 1957. 175 p. (Massovaia radiobiblioteka, no.269) (MLRA 10:5)
(Electronic apparatus and appliances)

ANDREYEV, Igor' Vasil'yevich, BERG, A.I., red.; BURLYAND, V.A., red.; VANEYEV, V.I., red.; GENISHTA, Ye.N., red.; DZHIGIT, I.S., red.; KAHAYEVA, A.M., red.; KHOZHKIL', E.T., red.; KULIKOVSKIY, A.A., red.; SMIRNOV, A.D., red.; TARASOV, F.I., red.; CHECHIK, P.O., red.; SHAMSHUR, V.I., red.; GANZBURG, M.D., red.; MEDVEDEV, L.Ya., tekhn. red.

[Cabinet designs for radio receivers] Vneshnee oformlenie priemnika. Moskva, Gos. energ. izd-vo, 1958. 46 p. (MIRA 11:8)
(Radio--Receivers and reception)

KULIKOVSKIY A.A.

KUGUSHEV, Aleksandr Mikhaylovich,; BERG, A.I., red.; BURDEYNYY, F.I., red.; BURLYAND, V.A., red.; VANEYEV, V.I., red.; GENISHTA, Ye.N., red.; DZHIGIT, I.S., red.; KANAYEVA, A.M., red.; KRENKEL', E.T., red.; KULIKOVSKIY, A.A., red.; SMIRNOV, A.D., red.; TARASOV, F.I., red.; CHECHIK, P.O., red.; SHAMSHUR, V.I., red.; BORUNOV, N.I., tekhn. red.

[Modern radio electronics] Sovremennaia radioelektronika. Moskva, Gos. energ. izd-vo, 1958. 62 p. (Massovaia radiobiblioteka, no. 300). (MIRA 11:11)

(Electronics)

MEERSON, Anatoliy Meyerovich, BERG, A.I., red.; BURGLYAND, V.A., red.; VANEYEV, V.I., red.; GENISHTA, Ye.N., red.; DZHIGIT, I.S., red.; KANAYEVA, A.M., red.; KREYKEL', E.T., red.; KULIKOVSKIY, A.A., red.; SMIRNOV, A.D., red.; TARASOV, F.I., red.; CHECHIK, P.O., red.[deceased] SHAMSHUR, V.I., red.; BORUNOV, N.I., tekhn.red.

[Testing radio tubes] Ispytanie radiolamp. Moskva, Gos. energ. izd-vo, 1958. 61 p. (Massovaia radiobiblioteka , no.303) (MIRA 11:9)
(Electron tubes--Testing)

SOBOLEVSKIY, Anatoliy Georgiyevich,; BERG, A.I.,red.; BURLYAND, V.A., red.; VANEYEV, V.I., red.; GENISHTA, Ye.N., red.; DZHIGIT, I.S., red.; KANAYEVA, A.M., red.; KRENKEL', E.T., red.; KULIKOVSKIY, A.A., red.; SMIRNOV, A.D., red.; TARASOV, F.I., red.; SHAMSHUR, V.I., red.; KRIBITSKIY, B.Kh., red.; LARIONOV, G.Ye., tekhn. red.

[Pulse techniques] Impul'snaia tekhnika. Moskva, Gos. energ. izd-vo, 1958. 167. (Massovaia radiobiblioteka, no. 308). (MIRA 11:11)
(Pulse techniques(Electronics))

PHASE I BOOK EXPLOITATION 804

Kulikovskiy, Aleksandr Aleksandrovich

Lineynyye kaskady radiopriyemikov (Linear Stages of Radio Receivers) Moscow, Gosenergoizdat, 1958. 350 p. 10,000 copies printed.

Ed.: Akalunin, S.A.; Tech. Ed.: Fridkin, A.M.

PURPOSE: This book is intended for students of vtuzes and tekhnikums and may be useful to specialists working in the field of radio reception.

COVERAGE: The book presents general information on radio receivers, basic types of block diagrams, resonance circuits, antenna feeder systems, input units, RF amplifiers, set noises and real sensitivity of radio receivers, transistor amplifiers, IF amplifiers, signal distortion and transients in the RF section of a receiver. The description of special properties of microwave receivers is closely

Card 1/18

connected with similar problems of longwave reception. The author states that the existing literature has not treated these questions in sufficient detail while in many cases the methods of technical calculation have not been developed. Serious difficulties exist due to the fact that many related problems in this field have been treated by means of different presentations and methods. This book offers a systematic description of the theory and calculation of RF linear components of radio receivers. Apart from questions not previously covered in similar works on the subject, the book contains some original material. The author thanks Professors N.M.Izyumov and N.I. Chistyakov for their help in preparing the book. There are 42 references of which 25 are Soviet and 17 English.

TABLE OF CONTENTS:

KULIKOVSKIY, A.A., red.; YENYUTIN, V.V., red.; TARASOV, F.I., red.; FRIDKIN, A.M., tekhn.red.

[Handbook for radio amateurs] Spravochnik radioliubitelia. Izd. 2-oe. Moskva, Gos. energ. izd-vo, 1958. 480 p. (Massovaia radiobiblioteka, no.286) (MIRA 11:5)
(Radio--Amateurs' manuals)

Filippov, A.G.

9(4) 24(6) PHASE I BOOK EXPLOITATION SOV/2765

Vsesoyuznoye nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi

Poluprovodnikovaya elektronika (Semiconductor Electronics) Moscow, Gosenergoizdat, 1959. 222 p. 13,950 copies printed.

Ed.: V.I. Shanskaya; Tech. Ed.: K.P. Voronin.

PURPOSE: The book is intended for engineering and technical personnel working with semiconductor devices.

CONTENTS: The book is a collection of lectures delivered at the All-Union Seminar on Semiconductor Electronics in March 1957. The seminar was organized by the Scientific and Technical Society of Radio Engineering and Electrical Communications imeni A.S. Popov. The authors of the lectures have attempted to systematize the basic information on the operation of semiconductor devices. The articles describe the operation and characteristics of crystal diodes and transistors and discuss their application in various low-frequency, high-frequency and pulse circuits. No personalities are mentioned. References appear at the end of each article.

Card 1/7

AUTHOR: Kulikovskiy, A.A. SOV/106-58-9-12/17

TITLE: The Parameters of a Detector Using a Semiconductor Diode (Parametry detektora s poluprovodnikovym diodom)

PERIODICAL: Elektrosvyaz', 1958, Nr 9, pp 71 - 73 (USSR)

ABSTRACT: It is usual in the analysis of semiconductor diodes to assume that the voltage/current characteristic is exponential. For real diodes this is only true in the small-signal region and for large signals the 2-straight-line representation of Fig 1 is more suitable. The present note evaluates the transfer coefficient and input conductance of a detector whose reverse conduction is appreciable. The expression for the current taken by the detector involves a function of cut-off angle, B. The exact variation with operating point of the detector is that of Fig 2 and it will be seen that it also may be well represented by 2 straight lines. The transfer coefficient of the detector is K_b and immediately below this the analogous expression for a vacuum diode is given. In the analysis of input conductance a quantity A is similarly represented by 2 straight lines as in Fig 3. The exact

Card 1/2

The Parameters of a Detector using a Semiconductor Diode

expression for input conductance is G_{vx}. A good practical approximation to input resistance is the formula for R_{vx} which demonstrates that even when the load resistance is infinite the input resistance can never exceed 1/3 the inverse resistance of the diode. It is suggested that diodes with a high inverse resistance would be chosen for narrow-band receivers, where circuit damping is to be least and that for wide-band receivers a diode with small forward resistance would be preferred so as to give as large a transfer coefficient as possible.

There are 3 figures and 2 references, both Soviet.

SUBMITTED: December 17, 1957

05212
SOV/142-2-3-20/27

9(2,3)

AUTHORS: Kulikovskiy, A.A., Potryasay, V.F., Sutyagin, V.Ya., Ryzhkov, A.S.

TITLE: The Terminology in the Field of Transistor Electronics

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1959, Vol 2, Nr 3, p 378 (USSR)

ABSTRACT: The authors refer to the article by T.M. Agakhanyan, B.N. Kononov and I.P. Stepanenko, titled "The Terminology in the Field of Transistor Electronics", published in Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1958, Vol 1, Nr 4. The authors agree in principle with the suggestions made in the aforementioned article and present some of their own ideas as an addition. For example the Russian terms "baza" (base) and "tranzistor" (transistor) should be sanctioned, although there might be some conflict with the term "poluprovodnikovyy diod" (semiconductor diode) which also belongs to the transistor class. The authors regard the terms "dyrochnyy tranzistor" ('hole' transistor) and "elektronnyy tranzistor" ('electron' transistor) as superflous and recommend the designation p-n-p or n-p-n transistor. Similar suggestions were made for the classification of diode types.

Card 1/2

05212
SOV/142-2-3-20/27

The Terminology in the Field of Transistor Electronics

ASSOCIATION: Voyenno-vozdushnaya inzhenernaya Akademiya imeni professora N.Ye. Zhukovskogo (Air Force Engineering Academy imeni Professor N.Ye. Zhukovskiy)

SUBMITTED: February 2, 1959

Card 2/2

AUTHOR: Kulikovskiy, A.A. SOV/109- --4-3-26/38

TITLE: Analysis of the Transient Phenomena in a Diode Detector, Taking into Account the Influence of the Detector Input on the Preceding Circuit (Analiz perekhodnykh protsessov v diodnom detektore s uchetom vliyaniya vkhoda detektora na predshestvuyushchiy kontur)

PERIODICAL: Radiotekhnika i Elektronika, Vol 4, Nr 3, 1959, pp 530-533 (USSR)

ABSTRACT: It is assumed that the detector is connected to an amplifier which is terminated with a single-tuned resonant circuit and that the load of the detector consists of a simple RC circuit. The amplitude of the voltage at the tuned circuit is expressed by (Ref 7):

$$U_m(t) = \frac{\omega_0}{2} \int_0^t R(t-x)\, I_{m1}(x)\, dx, \qquad (1)$$

where $I_{m1}(x)$ is the envelope of the first harmonic of the anode current passing through the circuit, while R(t) is the amplitude of the equivalent impedance of the circuit. The amplitude is expressed by Eq (5) where B

Card 1/2

Analysis of the Transient Phenomena in a Diode Detector, Taking into Account the Influence of the Detector Input on the Preceding Circuit

is defined by Eq (2); $\rho = R_K d$ is the characteristic quantity of the circuit. The amplitude of the envelope is given by Eq (6) where S is the slope of the diode, U_o is the voltage at the output of the detector, mU_m is the input voltage of the detector and S_{Π} is the slope of the amplifying tube. The voltage across the tuned circuit can therefore be written in the form of Eq (7). In the differential operatorial form, this can be written as Eq (8) from which the voltage at the output of the detector is expressed by Eq (10). The solution of Eq (10) is in the form of Eq (12).

Card 2/2

There are 9 Soviet references.

SUBMITTED: First submitted June 8, 1957; finally submitted, after revision, September 11, 1958

POPOV, Petr Aleksandrovich; BERG, A.I., red.; BURDEYNYY, F.I., red.; BURLYAND, V.A., red.; VANEYEV, V.I., red.; GEMISHTA, Ye.N., red.; DZHIGIT, I.S., red.; KAMAYEVA, A.N., red.; KREMEL', E.T., red.; KULIKOVSKIY, A.A., red.; SHIRNOV, A.D., red.; TARASOV, F.I., red.; SHAMSHUR, V.I., red.; KULIKOVSKIY, A.A., red.; LARIONOV, G.Ye., tekhn. red.

[Design of audio frequency transistor amplifiers] Raschet tranzistornykh usilitelei zvukovoi chastoty. Moskva, Gos. energ. izd-vo, 1960. 103 p. (Massovaya radiobiblioteka, no.378) (MIRA 14:5)

(Transistor amplifiers)

FEDOTOV, Ya.A., otv.red.; GAL'PERIN, Ye.I., zamestitel' otv.red.; BARKANOV, N.A., red.; BERGEL'SON, I.G., red.; BROYDE, A.M., red.; KANGHETSKIY, Yu.A., red.; KAUSOV, S.F., red.; KRASILOV, A.V., red.; KULIKOVSKIY, A.A., red.; NIKOLAYEVSKIY, I.F., red.; PENIN, N.A., red.; STEPANENKO, I.P., red.; VOLKOVA, I.M., red.; SVESHNIKOV, A.A., tekhn.red.

[Transistor devices and their applications; collection of articles] Poluprovodnikovye pribory i ikh primenenie; sbornik statei. Moskva, Izd-vo "Sovetskoe radio." No.4. 1960. 423 p. (MIRA 13:5)
(Transistors) (Electronic circuits)

FEDOTOV, Ya.A., otv.red.; BARKANOV, N.A., red.; BERGEL'SON, I.G., red.; BROYDE, A.M., red.; GAL'PERIN, Ye.I., zam.otv.red.; KAMENETSKIY, Yu.A., red.; KONEV, Yu.I., red.; KRASILOV, A.V., red.; KULIKOVSKIY, A.A., red.; NIKOLAYEVSKIY, I.F., red.; STEPANENKO, I.P., red.; VOLKOVA, I.M., red.; SVESHNIKOV, A.A., tekhn.red.

[Semiconductor devices and their applications] Poluprovodnikovye pribory i ikh primenenie; sbornik statei. Moskva, Izd-vo "Sovetskoe radio." No.5. 1960. 270 p. (MIRA 13:10)
(Transistors)

FEDOTOV, Ya.A., otv.red.; BARKANOV, N.A., red.; BERGEL'SON, I.G., red.; BROYDE, A.M., red.; GAL'PERIN, Ye.I., red.; KAMENETSKIY, Yu.A., red.; KAUSOV, S.F., red.; KOMKV, Yu.I., red.; KRASILOV, A.V., red.; KULIKOVSKIY, A.A., red.; NIKOLAYEVSKIY, I.F., red.; STEPANENKO, I.P., red.; VOLKOVA, I.M., red.; SMUROV, B.V., tekhn.red.

[Semiconductor devices and their applications] Poluprovodnikovye pribory i ikh primenenie; sbornik statei. Moskva, Izd-vo "Sovetskoe radio". No.6. 1960. 333 p. (MIRA 13:12)
(Semiconductors) (Transistors)

KULIKOVSKIY, A.A., red.; TARASOV, F.I., red.; BORUNOV, N.I., tekhn. red.

[Radio amateur's handbook] Spravochnik radioliubitelia. Izd.3. Moskva, Gos.energ. izd-vo, 1961. 500 p. (Massovaia radiobiblioteka, no.394) (MIRA 14:6)

(Radio)

KULIKOVSKIY, Aleksandr Aleksandrovich; SHAMSHUR, V.I., red.; FRIDKIN, L.M., tekhn. red.

[Stability of active linearized networks with new types of amplifying devices]Ustoichivost' aktivnykh linearizovannykh tsepei s usilitel'nymi priborami novykh tipov. Moskva, Gosenergoizdat, 1962. 191 p. (MIRA 16:1)
(Electric networks) (Transistors)

FEDOTOV, Ya.A., otv. red.; BERGEL'SON, I.G., red.; GAL'PERIN, Ye.I., zam. otv. red.; KAMENETSKIY, Yu.A., red.; KAUSOV, S.F., red.; KONEV, Yu.I., red.; KRASILOV, A.V., red.; KULIKOVSKIY, A.A., red.; NIKOLAYEVSKIY, I.F., red.; STEPANENKO, I.P., red.; VOLKOVA, I.M., red.; BELYAYEVA, V.V., tekhn. red.

[Semiconductor devices and their applications]Poluprovodnikovye pribory i ikh primenenie; sbornik statei. Pod red. IA.A.Fedotova. Moskva, Izd-vo "Sovetskoe radio." No.8. 1962. 332 p. (MIRA 15:10)

(Transistors)

KULIKOVSKIY, A.A.

Stable circuits containing active quadrupoles. Radiotekh. i elektron. 9 no.6:1067-1069 Je '64. (MIRA 17:7)

KULIKOVSKIY, A.A.

Study of feedback in transistor circuits. Radiotekhnika 19 no.2: 78-80 F '64. (MIRA 17:6)

1. Deystvitel'nyy chlen Nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrosvyazi imeni A.S. Popova.

POPOV, Petr Aleksandrovich; KULIKOVSKIY, A.A., red.

[Design of transistorized audio amplifiers] Raschet tranzistornykh usilitelei zvukovoi chastoty. Izd.2., perer. i dop. Moskva, Energiia, 1964. 94 p. (Massovaia radiobiblioteka, no.550) (MIRA 17:11)

"Investigating the Process of Obtaining Granulated Peat-Mineral Fertilizers." Cand Tech Sci, Division of Physicomathematical and Technical Sci, Acad Sci Belorussian SSR, Minsk, 1954. (RZhKhim, No 2, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (13)
SO: Sum. No. 598, 29 Jul 55

KULIKOVSKIY, A.A., kandidat tekhnicheskikh nauk.

Granulation of a peat mineral mixture by rolling. Trudy Inst.torf. AN BSSR 5:118-144 '56. (MLRA 9:12)
(Peat) (Fertilizers and manures)

MALYSHEV, F.A.; TISHKOVICH, A.V.; SELITRENNIKOV, A.I.; KULIKOVSKIY, A.A.; GALENCHIK, I.Z.

Winning of peat for agricultural purposes. Trudy inst. torf. AN BSSR 8:50-66 '59. (MIRA 13:12)
(Peat industry) (Fertilizers and manures)

KULIKOVSKIY, A.A.; SELITCHENKOV, A.I.

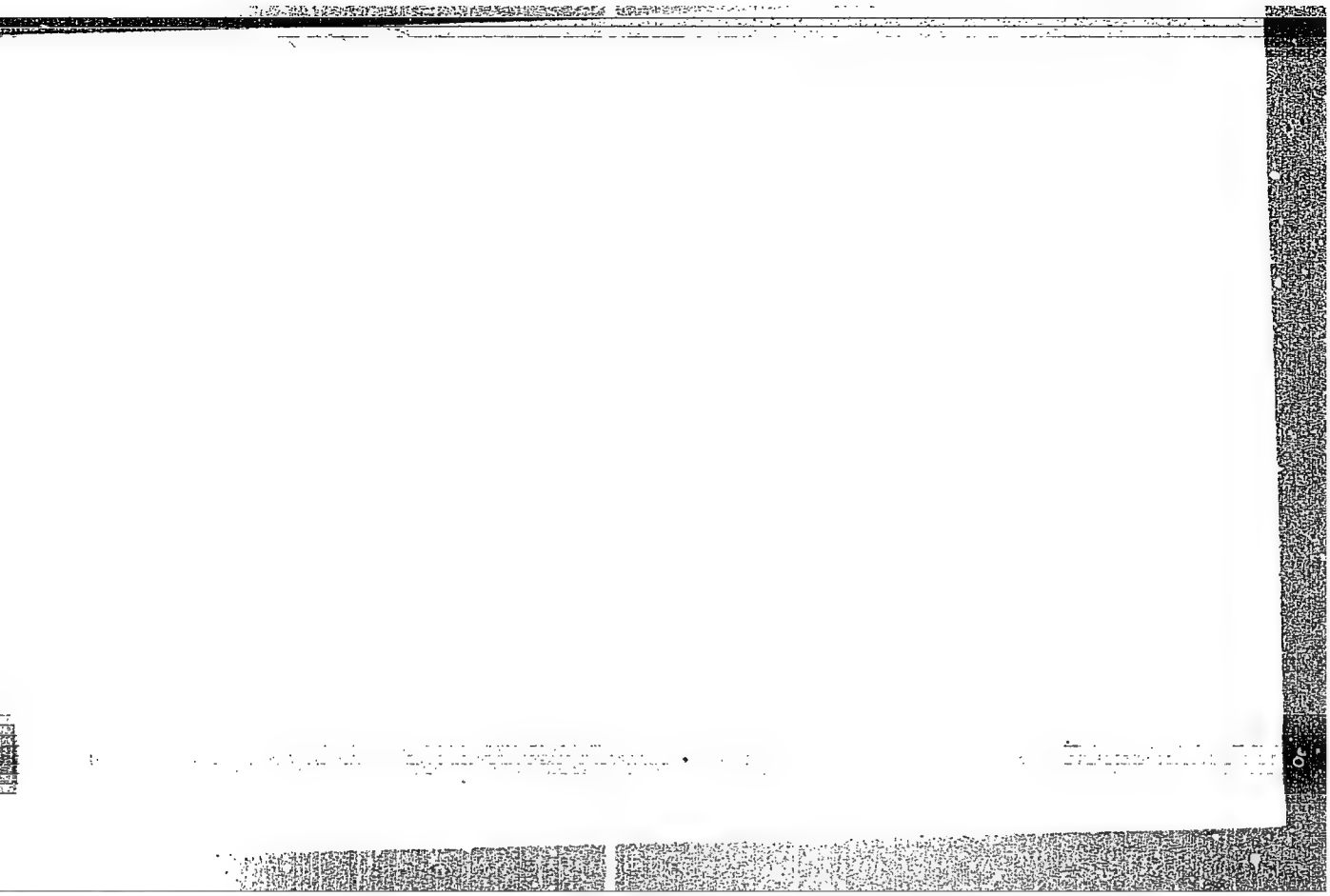
Complete mechanization of the winning of peat litter and development of the production of peat litter in White Russia. Trudy Inst. torf. AN BSSR 9:204-210 '60. (MIRA 14:2)
(White Russia—Peat)

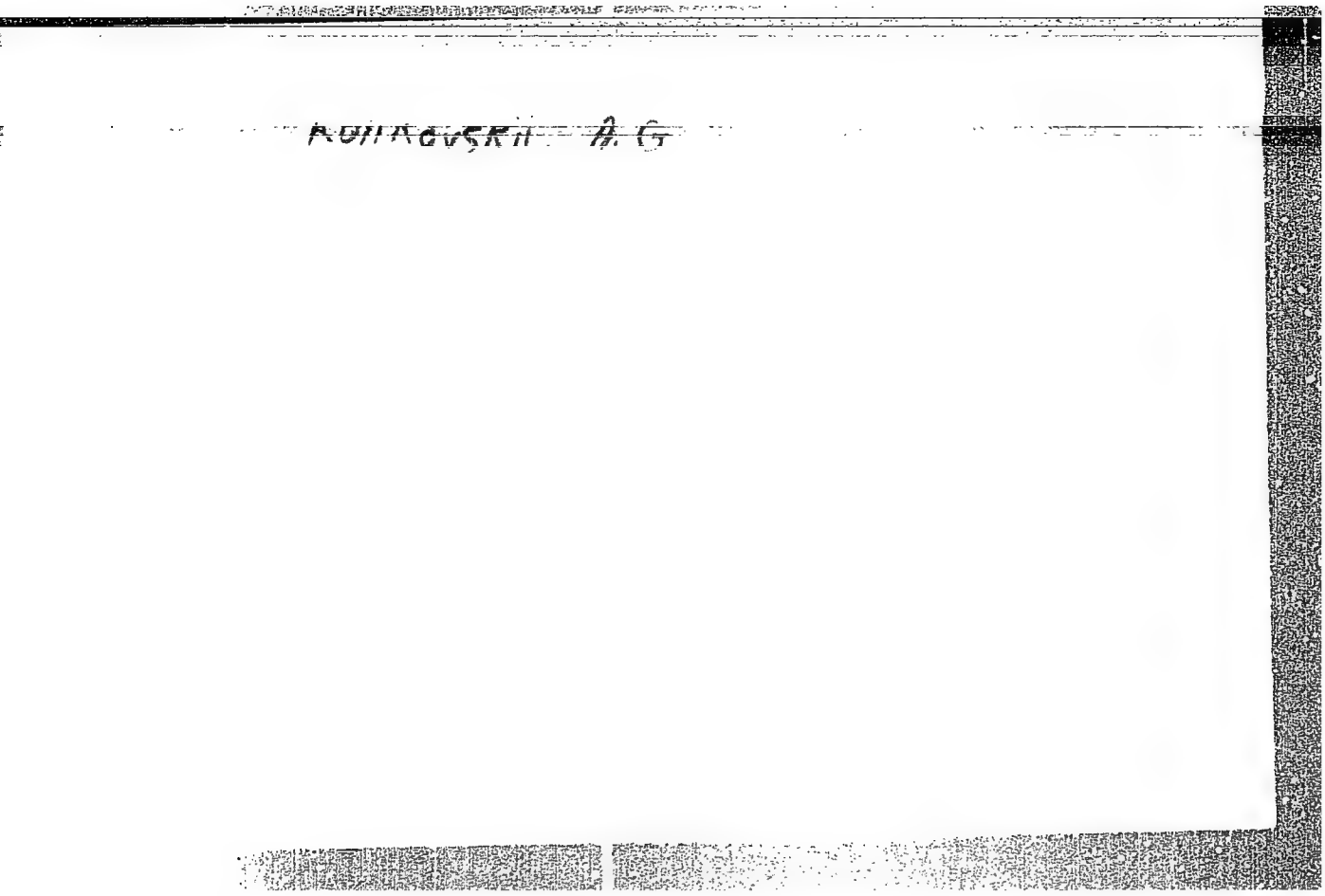
GUBENKO, A.B., doktor tekhn. nauk; ZUBAREV, G.N., inzh.; KULIKOVSKIY, A.B., inzh.; PETROVNIN, M.I., inzh.; PETROV, I.S., inzh.; BOLOTINA, A.V., red.izd-va; MIKHEYEVA, A.A., tekhn. red.

[Inflatable structures] Pnevmaticheskie stroitel'nye konstruktsii.[By] A.B.Gubenko i dr. Moskva, Gosstroiizdat, 1963. 125 p. (MIRA 16:10)
(Air-pressure support)

BARANOV, V.B. (Moskva); KULIKOVSKIY, A.G. (Moskva); LYUBIMOV, G.A. (Moskva)

Boundary layer on a plane plate in anisotropic magnetohydrodynamics.
Izv.AN SSSR. Mekh.i mashinostr. no.1:141-142 Ja-F '64.
(MIRA 17:4)





KULIKOVSKIY, A.G.

20-5-18/60

AUTHOR KULIKOVSKIY, A.G.,
TITLE On the Pulsation of Plasma in a Cylinder.
(K voprosu o pul'satsii plazmennogo shnura - Russian)
PERIODICAL Doklady Akad.Nauk SSSR, 1957, Vol 114, Nr 5, pp 984-987 (U.S.S.R.)

ABSTRACT Reference is made to two previous papers dealing with the same subject.The present paper investigates a certain class of rigorous solutions of equations of magnetic hydrodynamics, comprising particularly periodic solutions. The author investigates the onedimensional axially symmetric motions of an unlimited gas with infinite conductivity. First four equations of magnetic hydrodynamics are written down in Lagrange's coordinates. The magnetic lines of force are assumed to be closed concentric circles. An equation describes the acceleration of the particle, the others represent laws of conservation for mass, entropy, and magnetic flux. The present paper finds all solutions with homogeneous deformation, so that $r/r_0 = \mu(t)$ applies. Here μ shall not depend on the coordinate r_0. The velocity depends linearly on the radius. The solution is then explicitly written down. With t = 0 a concentrated current flows along the symmetry axis.Also for the current distribution at all other points of the space a formula is given.The forms of motion of the plasma which corresponds to the various amounts of the constants and roots occurring in the solution are enumerated in short: clashing,compressing of the gas at one point (at the moment of clashing together the velocity changes with a jerk and a new expansion takes place), flying apart,limita-

Card 1/2

20-5-18/60

On the Pulsation of Plasma in a Cylinder.

tion motions, steady equilibrium, non-steady equilibrium, periodic oscillations.
The author then investigates a cylinder of finite length and finite radius. In order to be able to describe the phenomenon within the cylinder by means of the obtained solution, it is necessary to fit conductive walls on the front surface, and pressure must be applied to the lateral surface which is equal to the pressure acting from within. A certain voltage must be applied to the ends of the cylinder, which can, however, be easily computed. In conclusion the energy balance is calculted. The solution obtained can easily be generalized for problems with helical magnetic lines of force.

ASSOCIATION Moscow State University.
PRESENTED BY SEDOV I.L., Member of the Academy
SUBMITTED 16.1.1957
AVAILABLE Library of Congress.
Card 2/2

KULIKOVSKIY, A.G.

Flow of a conducting liquid past magnetized bodies. Dokl. AN SSSR 117 no.2:199-202 N '57. (MIRA 11:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova. Predstavleno akademikom L.I. Sedovym.
(Magnetohydrodynamics)

KULIKOVSKIY, A. G.: Master Phys-Math Sci (diss) -- "On some new precise solutions of the equations of magnetic hydrodynamics". Moscow, 1958. 6 pp (Moscow State U im M. V. Lomonosov, Mechanical-Math Faculty), 150 copies

(KL, No 5, 1959, 142)

A. G Kulikovskiy

16(1)
AUTHORS: Sherry, I.A., University Lecturer, and 20V/55-58-2-33/35
Lopatov, V.D., Scientific Assistant

TITLE: Lecanosov - Lectures 1957 at the Mechanical-Mathematical Faculty of Moscow State University (Lektsii 1957 goda na Matematiko-mekhanicheskom fakul'tete MGU)

PERIODICAL: Vestnik Moskovskogo Universiteta, Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958 , Nr 2, pp 241-246 (USSR)

ABSTRACT: The Lecanosov lectures 1957 took place from October 17 - October 31, 1957 and were dedicated the 40-th anniversary of the October revolution.
In the general meeting A.N. Kolmogorov, Academician spoke "On Approximative Representation of Functions of Several Variables by Superposition of Functions With Less Variables and ε-Entropy of Classes of Function". The lecture generalizes the results of Kolmogorov, A.G. Vitushkin, V.I. Arnold and V.M. Tikhomirov. The contents has been already published (Doklady Akademii nauk SSSR,114,5). Professor Kh.A.Khachatrian, Member of the Academy of Sciences of the US SSR, spoke on "Investigation of the Boundary Layer of the Motion of a two-Component Liquid".
The other lectures were given separately in the sections mechanics and mathematics the following lectures were given.

1. A.I. Pavlenko, Lecturer : Generalization of the Theory of the Transverse Shock Against a Flexible Thread.
2. A.G. Kulikovskiy, Aspirant : Flow Around Magnetized Bodies by Conducting Liquid.
3. K.F. Voronoy, Lecturer : Instruments for the Analysis and Synthesis of Mechanisms
4. V.S. Lensky, Lecturer : Some General Laws in the Behavior of Elliptic Loaded Metals.
5. V.D. Klyushnikov, Aspirant : A Variant of the Theory of the Increase of Deformation and Plastic Stability.
6. Professor N.I. Ilenkin and Professor L.A. Lyusternik : Asymptotic Behavior of the Solutions of Linear Equations With Small Parameter in the Derivatives.
7. Professor O.A. Oleynik : Some Non-Linear Partial Differential Equations (Survey of the Results of V.S. Vantsel', Chzhou Yuy-lin', M.S. Tvetenskaya, A.S. Kalashnikov, Yu.S. Sabinen, S.L. Kamenomostskaya).
8. Professor K.K. Shark-Sare and P.S. Efimov, Senior Scientific Assistant : Automatization and Programming.

Card 3/5

SOV/20-120-3-12/67

AUTHOR: Kulikovskiy, A. G.

TITLE: On Media Permitting Unidimensional Motions With Homogeneous Deformation (O sredakh, dopuskayushchikh odnomernyye dvizheniya s odnorodnoy deformatsiyey)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 3, pp. 485 - 486 (USSR)

ABSTRACT: The present paper provides an answer to the following question: What equation of state must a medium satisfy which permits unidimensional motions with homogeneous deformation ? The author here investigates the following two cases: The motion satisfies either the condition of adiabaticity $\partial S/\partial t=0$ or the condition $\partial T/\partial r=0$. T here denotes temperature. The author in the first case puts the equation of state in the form $p=p_1(\rho, S)$, and in the second as $p=p_2(\rho, T)$. If exterior forces are lacking and if internal tensions are reduced to pressure (but also in some other cases in which gravitation is taken into account), the equation of state of the impulses leads to relation

Card 1/3

$\frac{1}{\rho_0}\frac{\partial p}{\partial r_0} = k(t)r_0$; ρ_0 here denotes the initial density. The last-mentioned equation is the starting point for further investigations. After some re-formations equations of state of the following type are obtained:

$$p_1(\rho, S) = f_1\left(\frac{\rho}{\rho_0(S)}\right)p_{01}(\rho_0(S)) + \varphi_1\left(\frac{\rho}{\rho_0(S)}\right)$$

$$p_2(\rho, T) = f_2(T)p_{02}\left(\frac{\rho}{a(T)}\right) + \varphi_2(T).$$

The author then determines such equations of state as permit unidimensional motions with homogeneous deformation in the case of any functions $\rho_0(S)$ and $a(T)$. By computation the following equations are obtained: $p_1(\rho, S) = A_1(S)\rho^{\gamma_1} + B_1$,

$p_2(\rho, T) = A_2(T)\rho^{\gamma_2} + B_2(T)$. Here A_1, γ_1 and B_1 are, in general, functions of S, whereas A_2, γ_2, and B_2 are functions of T.

On Media Permitting Unidimensional Motions With Homogeneous Deformation

SOV/20-120-3-12/67

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova (Moscow State University imeni M.V.Lomonosov)

PRESENTED: January 23, 1958, by L.I.Sedov, Member, Academy of Sciences, USSR

SUBMITTED: January 7, 1958

1. Equations of state--Analysis 2. Equations of state--Applications 3. Functions--Applications

Card 3/3

AUTHOR: Kulikovskiy, A.G. 20-120-5-15/67

TITLE: On Motions With a Homogeneous Deformation in the Magnetic Hydrodynamics (O dvizheniyakh s odnorodnoy deformatsiyey v magnitnoy gidrodinamike)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 120, Nr 5, pp 984-986 (USSR)

ABSTRACT: The author considers the equations of the magnetic hydrodynamics if the motion in the Lagrange form has the form

$$(L) \qquad x_i = M_{ij}(t)x_j^0 + M_i(t),$$

where the x_i are the orthogonal coordinates of the particle and $x_i^0 = x_i(0)$. Similar motions have already been considered in earlier papers of Sedov [Ref 1], the author [Ref 2] and Zagar [Ref 3]. In this case it is

$$(1) \quad \rho = \frac{1}{\Delta}\rho^0, \quad p = \frac{1}{\Delta^\gamma}p^0, \quad H_i = \frac{1}{\Delta}M_{ij}H_j^0,$$

where Δ is the determinant of the matrix $\|M_{ij}\|$. Substituting (1) in the motion equations $\frac{\partial^2 x}{\partial t^2} = -\frac{1}{\rho}\frac{\partial p}{\partial x_i} + \frac{1}{\rho}\frac{\partial T_{ij}}{\partial x_j}$,

Card 1/3

On Motions With a Homogeneous Deformation in the Magnetic Hydrodynamics 20-120-5-15/67

$T_{ij} = \frac{1}{4\pi} H_i H_j - \frac{1}{8\pi} H_k H_k$, the author obtains an equation

$$(2) \qquad \frac{d^2 M_i}{dt^2} + x_j^0 \frac{d^2 M_{ij}}{dt^2} = R.$$

It is assumed that the right side of (2) remains linear for arbitrary affine deformations of the medium. Then $\frac{1}{\rho^0} \frac{\partial p^0}{\partial x_i^0}$ and $\frac{1}{\rho^0} \frac{\partial H_m^0 H_n^0}{\partial x_l^0}$ are linear functions of x_j^0, i.e. it is

$\frac{1}{\rho^0} \frac{\partial p^0}{\partial x_i^0} = p_{ij} x_j^0 + p_i$, $\frac{1}{\rho^0} \frac{\partial H_m^0 H_n^0}{\partial x_l^0} = a_{mn}{}_l{}_j x_j^0 + a_{mnl}$, where p and a are constants. Let the matrix $\|p_{ij}\|$ have the rank 3. Then p^0 is an arbitrary function of $\phi = p_{ij} x_i^0 x_j^0 + p_i x_i^0 + \text{const}$ and $\rho^0 = \varkappa p^{0\prime}(\phi)$, $\varkappa$ = const and the accent means derivation with respect to ϕ. If $\rho^0 \neq$ const, then $H_i^0 H_k^0 = \alpha_{ik} p^0 + \beta_{ik}$ - the

Card 2/3

On Motions With a Homogeneous Deformation in the Magnetic Hydrodynamics 20-120-5-15/67

magnetic lines of force are straight lines. If $\varrho^0 = \text{const}$, then $p_0 = \phi$, $H_i^0 H_k^0 = \phi_{ik}$, where ϕ and ϕ_{ik} are polynomials of second degree in x_j^0 and $\phi_{ik}^2 = \phi_{ii}\phi_{kk}$. Only if all ϕ_{ii} are squares of linear factors, then the magnetic lines of force are not even and are the integral curves of $\frac{dx_i^0}{dt} = h_{ik}x_k^0 + h_i$. Excluding the case of straight lines of force, then the gas moves according to the equation (L) if $\varrho^0 = \text{const}$, $p^0 = p_{ij}x_i^0 x_j^0 + p_i x_i^0 + \text{const}$, $H_i^0 = h_{ik}x_k^0 + h_i$.

There are 3 references, 2 of which are Soviet and 1 Italian.

PRESENTED: January 23, 1958, by L.I.Sedov, Academician
SUBMITTED: December 27, 1957

1. Gases--Motion 2. Gas flow--Magnetic factors 3. Mathematics

Card 3/3

10(4), 24(3) SOV/20-121-6-9/45

AUTHOR: Kulikovskiy, A. G.

TITLE: On Riemann's Waves in Magnetical Hydrodynamics (O volnakh Rimana v magnitnoy gidrodinamike)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 6, pp 987-990 (USSR)

ABSTRACT: This paper investigates the above-mentioned waves for any position of the magnetic field with respect to the wave front. This causes new mechanical effects. The author first gives the equations for the isentropic motion (as plane waves) of an ideal gas of infinite conductivity in the presence of a magnetic field. The author then investigates the solutions which depend on a certain combination of the independent variables $\varphi(x,t)$. The above-mentioned initial equations are adapted to this special case. The solution of this system is then discussed. The only possible solution is given explicitly. Next, other types of waves are investigated. In the automodel solutions, rotatory discontinuities correspond to the wave which propagates with the velocity $a_1 = H_x/\sqrt{4\pi\rho}$.

Card 1/2

On Riemann's Waves in Magnetical Hydrodynamics SOV/20-121-6-9/45

The solutions discussed in this paper may be used also for the purpose of solving the problem of the disintegration of any discontinuity in magnetic hydrodynamics and also for the solution of the piston problem. In these problems continuous solutions and also shock waves are possible. In those variables in which the problem of the Riemann (Riman) waves was solved, the variation of the quantities on the shock wave may be found in an explicit form. There are 2 figures and 2 references, [illegible] which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: April 18, 1958, by L. I. Sedov, Academician

SUBMITTED: April 17, 1958

Card 2/2

PHASE I BOOK EXPLOITATION SOV/5762

Latviyskiy gidrodinamika i dinamika plazmy; trudy Konferentsii.
(Problems in Magnetohydrodynamics and Plasma Dynamics; Transactions of a Conference) Riga, Izd-vo AN Latviyskoy SSR, 1959. 345 p.
Errata slip inserted. 1,000 copies printed.

Sponsoring Agency: Akademiya nauk Latviyskoy SSR. Institut fiziki.

Editorial Board: B.A. Frank-Kamenetskiy, Doctor of Physics and Mathematics, Professor; I.M. Kirko, Professor; A.I. Vol'dek, Doctor of Technical Sciences, Professor; Ya.M. Kreyn, Doctor of Physics and Mathematics; V.Ya. Veldre, Candidate of Physics and Mathematics; V.O. Vitol, Candidate of Physics and Mathematics; Ya.M. Kondrat'; and V.Ya. Krevchenko.

Ed.: A. Zyrul'nieks; Tech. Ed.: A. Elyertsya

PURPOSE: This book is intended for physicists working in the field of magnetohydrodynamics and plasma dynamics.

COVERAGE: This volume contains the transactions of a conference held in Riga, June 1958, on problems in applied and theoretical magnetohydrodynamics. The objects of the conference were the investigation of the basic trends in theoretical and applied magnetohydrodynamics, establishing contact between people doing research in different branches of magnetohydrodynamics and promoting the participation of theoretical physicists in problems in applied magnetohydrodynamics. More than 160 persons from different parts of the Soviet Union took part in the conference, and 55 papers were read. Similar conferences are to be held regularly in the future; the next such conference is scheduled to be held in Riga in June 1960. In this present collection of the transactions of the conference, most of the papers and comments on papers are presented by the authors themselves in an abridged form. The book is divided into two parts: the first part deals with problems in theoretical magnetohydrodynamics and plasma dynamics, and consists of 33 articles on such aspects of the problem as the equilibrium of plasma in a magnetic field (G.V. Gordeyev and A.I. Grimenl), hydrodynamics in astrophysics (B.A. Frank-Kamenetskiy), magnetohydrodynamic acceleration of plasma (A.I. Morozov), magnetohydrodynamic waves and the investigation of cosmic-ray variations (L.I. Dorman), acceleration of plasma in a magnetic field (G.V. Gordeyev and A.I. Grimenl), stability of shock waves and magnetohydrodynamics (A.I. Akhiyezer). The second part, consisting of 33 articles, deals with problems of experimental magnetohydrodynamics, including the application of physical simulation for investigation of electromagnetic processes in liquid metals (I.M. Kirko) and the development of electromagnetic pumps (V.O. Kiriliov), at the Institute of Physics of the Academy of Sciences, Latvian SSR. Several articles are devoted to induction pumps, electromagnetic crucibles, electromagnetic stirrers for molten metals, and their application in the metallurgical industry including schematic diagrams of their power-supply systems. References are given at the end of most of the articles.

Card 7/12

24 (3)

AUTHORS: Kulikovskiy, A. G., Lyubimov, G. A. (Moscow)

SOV/179-59-4-16/40

TITLE: On the Possible Kinds of Crack With a Conductivity Jump

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye, 1959, Nr 4, pp 130-131 (USSR)

ABSTRACT: If in a flow of gas there is a surface with a jump-like change of its parameters, the mass-, momentum- and energy-conservation laws must be observed in the passing through this surface. Under certain assumptions made here, these laws are indicated in the form of formulas (1) (Ref 1). At given parameters of the approaching flow as well as of the electromagnetic field in front of the discontinuity surface, the formulas (1) determine the flow- and field parameters behind the discontinuity. It is shown that the presence of a single steady surface at given parameters of the approaching flow does not yet make it possible to solve only an unsteady problem with cracks of similar kind (e. g. the problem of the motion of a flat piston). The structure of the discontinuity surface with a conductivity jump is investigated. The procedure is similar to that described in the papers (Refs 2,3). The curve ABC shown in the figure is

Card 1/2